REMARKS

Reconsideration And Allowance Are Respectfully Requested.

Claims 20-38 are currently pending. Claim 20 has been amended. Claims 27, 28 and 29 have been canceled. Claims 30-38 have been withdrawn based upon a prior Election of Species.

No new claims have been added. No new matter has been added. Reconsideration is respectfully requested.

Applicants would first like to thank Primary Examiner Behrend for the courtesies extended during the interview conducted on October 28, 2003. During the course of this interview, the prior art was discussed as it relates to proposed changes to claim 20. Primary Examiner Behrend indicated that the provision of an unsealed slit was common in the art of providing shielding for a pipe and that he believed proposed amendments to claim 20 to be obvious based upon the prior art. Despite this contention, Applicants submit the preceding amendments which attempt to amend claim 20 so as to read over the prior art.

In particular, claims 20-25 stand rejected under 35 U.S.C. § 102(b) as being clearly anticipated by U.S. Patent Nos. 3,515,625 to Sedlak et al. (Sedlak) or 3,864,124 to Breton et al. (Breton), as well as GB 954,594 to Weinberger (Weinberger). Claims 20-26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Breton or Weinberger. Claim 26 stands rejected under 35 U.S.C. §102(b) as being anticipated by Sedlak. Claims 20 -25 stand rejected under 35 U.S.C §103(a) as being unpatentable over any of Sedlak, Breton or Weinberger, and further in view of U.S. Patent Nos. 3,045,121 Leguillon (Leguillon), 3,895,143 to Tarlow (Tarlow) and 4,938,233 to Orrison, Jr. (Orrison) Claim 26 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Sedlak and

further in view of Leguillon, Orrison or Tarlow. Claims 20-27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Breton, Sedlak or Weinberg alone or with U.S. Patent No. 3,675,061 to Harrison (Harrison), alone or with any of U.S. Patent Nos. 2,175,283 to Cote (Cote), 4,748,060 to Fry et al. (Fry), 4,857,371 to McClintock (McClintock). Claims 20-27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Breton, Sedlak or Weinberger in view of U.S. Patent Nos. 2,497,543 to Frevel (Frevel) or 2,830,000 to Labino (Labino), or Japanese Patent No. 59-52799 ('799 patent). Claims 28 and 29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sedlak, Breton or Weinberger in view of U.S. Patent Nos. 2,063,329 to Morrison (Morrison), 2,286,877 to Sternlicht (Sternlicht), 2,312,921 to Lubow (Lubow) and 3,311,933 to Allen (Allen), as well as GB 856,747 to Futo et al. (Futo). Claims 28 and 29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sedlak, Breton or Weinberger alone or with Harrison, alone or with any of Cote, Fry, McClintock and further in view of Lubow, Sternlicht, Allen, Futo or Morrison. Claims 28 and 29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sedlak, Breton or Weinberger in view of Frevel, Labino or the '799 patent and further in view of Lubow, Sternlicht, Allen, Futo or Morrison. These rejections are respectfully traversed in view of the preceding amendments and the remarks which follow.

In particular, claim 20 has been amended to define a moulded shield for a source of γ-radiation. The moulded shield includes a cylindrical shield body having a cavity shaped and dimensioned to receive the source. The shield body is constructed in the form of a tube with an inner face and an outer face, and a longitudinal slit for fitting over a pipe so as to permit the passage of the source into the cavity. The slit extends from the inner face to the outer face at an oblique angle relative to the radius of the shield body and the slit is unsealed along its length to facilitate the

passage of the source therethrough. The shield body further includes a core layer of cured liquid silicone resin loaded with particulate γ -radiation shielding material adapted to surround a radiation source located in the cavity. The core layer is located between the two outer layers of the solid polymeric material.

In contrast to the claimed invention, none of the primary references, that is, Sedlak, Breton or Weinberger, disclose a shield having an obliquely oriented, unsealed slit as claimed. In fact these references merely disclose radiation shielding materials. Lubow, Sternlicht, Allen, Futo and Morrison have been cited as suggesting the obviousness of modifying Sedlak, Breton or Weinberger with an angled unsealed slit. However, these prior art references merely disclose various seams used in protective materials. They do not disclose the obviousness of applying the claimed slit to a cylindrical shield body having a core layer of liquid silicon resin loaded with particulate γ-radiation shielding material. In addition, these references failed to disclose an unsealed slit as claimed.

The highly specific nature of the shield body material dictates that its construction is very distinct from prior radiation shields and it would, as such, have not been obvious to modify a cylindrical shield to include an obliquely oriented, unsealed slit as claimed. For example, Morrison discloses a two-part shield having first and second portions which are secured together. Sternlicht and Lubow disclose protective gloves having stitched seams. Allen discloses a container having rigidly sealed edges. Futo discloses blocks which are stacked to create a shield. None of these references disclose a flexible, moulded shield formed from a cured liquid silicone resin having a slit extending at an oblique angle relative to the radius of the shield body, wherein the slit is unsealed along its length to facilitate the passage of the source therethrough. Rather, the teaching references disclose a variety of sealed structures, none of which are adapted for the ready attachment to a

source of y-radiation.

In fact, it is Applicants' opinion that the rational for the proposed modification of a shield body including a core layer of cured liquid silicone resin loaded with particular γ-radiation shielding material is only taught by the present application and the basis for the outstanding rejection is, therefore, based upon impermissible hindsight. With the foregoing in mind, it is Applicants' opinion that amended claim 20 now overcomes the prior art of record and Applicants respectfully request that the outstanding rejection relating thereto be withdrawn. As to those claims dependent upon independent claim 20, they are believed to overcome the prior art of record for the reasons presented above. As such, Applicants respectfully request that these rejections also be withdrawn.

It is believed that this case is in condition for allowance and reconsideration thereof and early issuance is respectfully requested. If it is felt that an interview would expedite prosecution of this application, please do not hesitate to contact Aplicants' representative at the below number.

Respectfully submitted,

Howard N. Flaxman

Registration No. 34,595

WELSH & FLAXMAN LLC 2450 Crystal Drive, Suite 112 Arlington, VA 22202 Telephone No: (703) 920-1122

Our Docket No: ITW-12287